

PTO/SB/08A (10-01)

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INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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Sheet 3 of 12

## Complete If Known

Application Number	09/432,503
Filing Date	November 2, 1999
First Named Inventor	Cech, Thomas R., et. al.
Art Unit	1652
Examiner Name	Peter P. Tung
Attorney Docket Number	015389-002611US

## U.S. PATENT DOCUMENTS

Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
AA	08/751,189		11-15-1988	Harrington, et al.	
AB	80/038,750		02-20-1987	Counter, et al.	
AC	3,817,837		08-18-1974	Tanenholz et al.	
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AQ	5,770,422		08-23-1998	Collins	
AR	6,083,809		07-25-2000	Cech, et al.	
AS	6,258,636 - B1		07-10-2001	Villepontieu et al.	
AT	6,261,666 - B1		07-17-2001	Weinrich et al.	
AU	6,261,656 - B1		07-17-2001	Cech et al.	
AV	6,083,806		07-26-2000	Cech et al.	
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AX	6,475,789 B1		11-05-2002	Cech et al.	

## FOREIGN PATENT DOCUMENTS

Examiner Initials <sup>2</sup>	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>4</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>				
AY		JP	09154575-A			08-17-97	
AZ		PCT	WO 84/03564			09-13-84	
BA		PCT	WO 85/13382			05-18-85	
BB		PCT	WO 88/01635			01-25-86	
BC		PCT	WO 98/12811			05-02-98	
BD		PCT	WO 98/16680			06-27-98	
BE		PCT	WO 98/40868			12-19-98	

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Sheet 4 of 12

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Application Number	09/432,503
Filing Date	November 2, 1999
First Named Inventor	Cech, Thomas R., et. al.
Art Unit	1652
Examiner Name	Peter P. Tung
Attorney Docket Number	015389-002611US

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	BF	PCT	WO 98/01542		01-15-98		
	BG	PCT	WO 98/01543		01-15-98		
	BH	PCT	WO 98/07838		03-05-98		
	BI	PCT	WO 98/08938		02-26-98		
	BJ	PCT	WO 98/21343		05-22-98		
	BK	PCT	WO 98/37181		08-27-98		
	BL	PCT	WO 98/45450		10-15-98		
	BM	PCT	WO98/59040		12/30/98		
	BN	PCT	WO99/01560		01/14/99		

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Art Unit	1652
Examiner Name	Peter P. Tung

Attorney Docket Number 015389-002611US

## OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BO	1994 Genome Issue of <i>Science</i> (265:1981f)	
	BP	Anderson and Young, "Quantitative Filter Hybridization" in <i>Nucleic Acid Hybridization</i> pp73-111 (1985)	
	BQ	Ausubel <i>et al.</i> ; (1989); <i>Current Protocols in Molecular Biology</i> ; pp 5.1-5.11, 18.1-18.3 and 18.9-18.20; John Wiley & Sons, New York NY	
	BR	Autxier <i>et al.</i> , "Reconstitution of human telomerase activity and identification of a minimal functional region of the human telomerase RNA," (1996) <i>EMBO J.</i> , 15:5928	
	BS	Auxxier and Greider, "Functional reconstitution of wild-type and mutant <i>Tetrahymena</i> telomerase," (1994) <i>Genes Develop.</i> , 8:583	
	BT	Berger and Kimmel, <i>Guide to Molecular Cloning Techniques</i> ; (1987); Meth. Enzymol.; vol. 152; pp 305-389; Academic Press; San Diego CA	
	BU	Biessman <i>et al.</i> , "Addition of Telomere-Associated HeT DNA Sequences "Heals" Broken Chromosome Ends in <i>Drosophila</i> ," (1990) <i>Cell</i> , 61:663	
	BV	Bitter <i>et al.</i> , "Expression and secretion vectors for yeast," Meth Enzymol., (1987) 153:518	
	BW	Blackburn and Chlou, "Non-nucleosomal packaging of a tandemly repeated DNA sequence at termini of extrachromosomal DNA coding for rRNA in <i>Tetrahymena</i> ," (1981) <i>Proc. Natl. Acad. Sci.</i> , 78:2263	
	BX	Blackburn and Gall, "A tandemly repeated sequence at the termini of the extrachromosomal ribosomal RNA genes in <i>Tetrahymena</i> ," (1978) <i>J. Mol. Biol.</i> , 120:33	
	BY	Blackburn, "Telomerases," (1992) <i>Ann. Rev. Biochem.</i> , 61:113	
		Bodnar <i>et al.</i> , "Extension of Life-Span by Introduction of Telomerase into Normal Human Cells," (1998) <i>Science</i> , 279:349	
		Bradford, "A Rapid and Sensitive method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding," (1976) <i>Anal. Biochem.</i> , 72:248	
		Braunstein <i>et al.</i> , "Transcriptional silencing in yeast is associated with reduced nucleosome acetylation," (1993) <i>Genes Develop.</i> , 7:592	

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<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet 6 of 12

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Examiner Name	Peter P. Tung
Attorney Docket Number	015389-002611US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No. <sup>1</sup>	
		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
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		Caruthers et al., "New chemical methods for synthesizing polynucleotides," (1980) Nucleic Acids Res. Symp. Ser., 215-223
		Chan and Tye, "Organization of DNA sequences and replication origins at yeast telomeres," (1983) Cell, 33:563
		Colbere-Garapin et al., "A new dominant hybrid selective marker for higher eukaryotic cells," (1981) J. Mol. Biol., 150:1
		Cole et al., "The EBV-hybridoma technique and its application to human lung cancer," Monoclonal Antibodies and Cancer Therapy, Alan R. Liss Inc., New York NY 77-96 (1985)
		Collins et al., "Purification of Tetrahymena telomerase and cloning of genes encoding the two protein components of the enzyme," (1995) Cell, 81:677
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		Coombs, Dictionary of Biotechnology, (1994); pp. 101-102, 283, 301 and 332; Stockton Press, New York NY
		Cote et al., "Generation of human monoclonal antibodies reactive with cellular antigens," (1983) Proc. Natl. Acad. Sci., 80:2026
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Examiner Signature		Date Considered
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## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Fang et al., "Oxytricha telomere-binding protein: separable DNA-binding and dimerization domains of the $\alpha$ -subunit," <i>Genes Develop.</i> 7:870 (1993) and Gray et al., (1991) <i>Cell</i> 67:807	
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Sheet 8 of 12

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		Hampton et al.; <i>Serological Methods a Laboratory Manual</i> ; (1990); pp. 33-86, 179-286; APS Press, St Paul MN	
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		Lamond and Sproat; (1994) "Isolation and Characterization of Ribonucleoprotein Complexes;" in <i>RNA Processing: A Practical Approach</i> ; (Higgins, S.J. and Hawes, B.D., Eds.), Volume 1; pp103-140		
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		Lustig and Petes, "Identification of yeast mutants with altered telomere structure," (1986) <i>Proc. Natl. Acad. Sci.</i> , 83:1398		
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		Merrifield, "Solid phase peptide synthesis. I. The synthesis of a tetrapeptide," (1963) <i>J. Am. Chem. Soc.</i> , 85:2149		

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	09/432,503
(use as many sheets as necessary)				Filing Date	November 2, 1999
Sheet	10	of	12	First Named Inventor	Cech, Thomas R., et. al.
				Art Unit	1652
				Examiner Name	Peter P. Tung
				Attorney Docket Number	015389-002611US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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		Meyerson et al., "hEST2, the Putative Human Telomerase Catalytic Subunit Gene, Is Up-Regulated in Tumor Cells and during Immortalization," (1997) <i>Cell</i> , 80:785	
		Murray, In <i>McGraw Hill Yearbook of Science and Technology</i> , (1992) McGraw Hill, New York NY, pp 191-196	
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		Oka et al., "Inverted terminal repeat sequence in the macronuclear DNA of <i>Stylonychia pustulata</i> ," (1980) <i>Gene</i> , 10:301	
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		Sambrook et al.; <i>Molecular Cloning. A Laboratory Manual</i> ; (1989); pp. 8.1-8.86 and 16.1-17.44; Cold Spring Harbor Press, Plainview NY	

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		Sanger <i>et al.</i> , "DNA sequencing with chain-terminating inhibitors," (1977) <i>Proc. Natl. Acad. Sci.</i> , 74:5463	
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		Shampay and Blackburn, "Generation of telomere-length heterogeneity in <i>Saccharomyces cerevisiae</i> ," (1988) <i>Proc. Natl. Acad. Sci.</i> , 85:534	
		Sheen and Levis, "Transposition of the LINE-like retrotransposon TART to <i>Drosophila</i> chromosome termini," (1994) <i>Proc. Natl. Acad. Sci.</i> , 91:12510	
		Singer and Gottschling, "TLC1: Template RNA Component of <i>Saccharomyces cerevisiae</i> Telomerase," (1994) <i>Science</i> 268:404	
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		Wellinger <i>et al.</i> , "Origin activation and formation of single-strand TG <sub>n</sub> tails occur sequentially in late S phase on a Yeast linear plasmid," (1993) <i>Mol. Cell. Biol.</i> , 13:4057	

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		Wellinger et al., "Saccharomyces Telomeres Acquire Single-Strand TG <sub>1-3</sub> Tails Late in S Phase," (1993) <i>Cell</i> 72:51	
		Whitehead Institute/MIT Center for Genome Research, Genetic Map of the Mouse, Database Release 10, April 28, 1995	
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		Zaug et al., "Catalysis of RNA Cleavage by a Ribozyme Derived from the Group I Intron of <i>Anabaena</i> Pre-tRNA <sup>Leu</sup> ," (1996); <i>Nucleic Acids Research</i> , 24:532-533	

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